

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. (Currently Amended) A method for loading a first kernel module, comprising:
 - loading a preload module into a kernel, wherein loading the preload module comprises creating a dynamic dependency list;
 - loading the first kernel module comprising a static dependency list into the kernel;
 - triggering a hook when the static dependency list is reviewed;
 - obtaining module information associated with the first kernel module using the hook;
 - searching, in the dynamic dependency list, for a dynamic dependency between associated with the first kernel module and a second kernel module in the dynamic dependency list using the module information; and
 - updating the static dependency list with the dynamic dependency between the first kernel module and the second kernel module to obtain an updated static dependency list [[if]] when the dynamic dependency between associated with the first kernel module and the second kernel module is present in the dynamic dependency list.
2. (Original) The method of claim 1, further comprising:
 - defining a configuration file, wherein the configuration file is read by the preload module to create the dynamic dependency list.
3. (Currently Amended) The method of claim [[1]] 2, further comprising:
 - updating the configuration file to obtain an updated configuration file;
 - unloading the preload module from the kernel;
 - re-loading the preload module into the kernel, wherein re-loading the preload module comprises reading the updated configuration file to generate an updated dynamic dependency list.
4. (Original) The method of claim 1, further comprising:
 - installing the hook using the preload module.

5. (Currently Amended) The method of claim 1, further comprising:
 - creating an interposer module, wherein the interposer module defines a new kernel symbol definition for a kernel symbol;
 - defining a configuration file, wherein the configuration file indicates that the first kernel module is dependent on the interposer module;
 - loading the interposer module before the first kernel module using the static dependency list;
 - re-defining the kernel symbol using the new kernel symbol definition;
 - loading the first kernel module, wherein the first kernel module comprises the kernel symbol; and
 - resolving the kernel using the new kernel symbol definition.
6. (Original) The method of claim 5, wherein the interposer module comprises a reference count.
7. (Original) The method of claim 1, wherein the hook is installed in a kernel runtime loader.
8. (Currently Amended) The method of claim 1, wherein the first kernel module comprises a flag indicating that a kernel symbol may have multiple definitions.
9. (Original) The method of claim 1, wherein updating the static dependency list comprises adding the dynamic dependency to the static dependency list.
10. (Currently Amended) A system comprising:
 - a processor;
 - a first kernel module executing on the processor and having a static dependency list and a kernel symbol;
 - a modified kernel runtime loader configured to load the first kernel module using the static dependency list; and
 - a preload module comprising a dynamic dependency list, wherein the preload module is configured to install a hook into the modified kernel runtime loader,wherein the hook is configured to update the static dependency list using the dynamic dependency list to obtain an updated static dependency list [[if]] when a dynamic

dependency between ~~associated with~~ the first kernel module and a second kernel module is present in the dynamic dependency list.

11. (Currently Amended) The system of claim 10, further comprising:
a configuration file configured to define ~~[[a]]~~ the dynamic dependency,
wherein the configuration file is used to generate the dynamic dependency list.
12. (Original) The system of claim 11, wherein the configuration file is read by the preload module when the preload module is loaded.
13. (Original) The system of claim 11, wherein the preload module is unloaded and reloaded when the configuration file is modified.
14. (Currently Amended) The system of claim 10, further comprising:
an interposer module configured to provide a new kernel symbol definition for the kernel symbol, wherein the first kernel module is dependent upon the interposer module.
15. (Currently Amended) The system of claim 14, further comprising:
a configuration file configured to define the dynamic dependency,
wherein the configuration file indicates that the first kernel module is dependent upon the interposer module.
16. (Original) The system of claim 14, wherein the kernel symbol is resolved using the new kernel symbol definition.
17. (Original) The system of claim 14, wherein the interposer module comprises a reference count.
18. (Currently Amended) The system of claim 14, wherein the first kernel module comprises a flag indicating that a kernel symbol may have multiple definitions.
19. (Currently Amended) The system of claim 10, wherein the preload module searches the dynamic dependency list using first kernel module information to determine whether the dynamic dependency associated with the first kernel module is present.

20. (Original) The system of claim 10, wherein updating the static dependency list comprises adding the dynamic dependency to the static dependency list.
21. (Currently Amended) A computer system for loading a first kernel module, comprising:
- a processor;
 - a memory;
 - a storage device;
 - a computer display; and
- software instructions stored in the memory for enabling the computer system under control of the processor, to perform:
- loading a preload module into a kernel, wherein loading the preload module comprises creating a dynamic dependency list;
 - loading the first kernel module comprising a static dependency list into the kernel;
 - triggering a hook when the static dependency list is reviewed;
 - obtaining module information associated with the first kernel module using the hook;
 - searching, in the dynamic dependency list, for a dynamic dependency between ~~associated with the first kernel module and a second kernel module in the~~ dynamic dependency list using the module information; and
 - updating the static dependency list with the dynamic dependency between the first kernel module and the second kernel module to obtain an updated static dependency list, ~~[[if]]~~ when the dynamic dependency between ~~associated with the first kernel module and the second~~ is present in the dynamic dependency list.

22. (Currently Amended) A network system having a plurality of nodes, comprising:
- a first kernel module having a static dependency list and a kernel symbol;
 - a modified kernel runtime loader configured to load the first kernel module using the static dependency list; and
 - a preload module comprising a dynamic dependency list, wherein the preload module is configured to install a hook into the modified kernel runtime loader,
- wherein the hook is configured to update the static dependency list using the dynamic dependency list to obtain an updated static dependency list ~~[[if]]~~ when a dynamic dependency between associated with the first kernel module and a second kernel module is present in the dynamic dependency list,
- wherein the kernel module executes on any node of the plurality of nodes,
- wherein the modified kernel module runtime loader executes on any node of the plurality of nodes,
- wherein the preload module executes on any node of the plurality of nodes, and
- wherein at least one of the plurality of nodes comprises a processor.